Plovdiv, November 2013

EUROPE-INBO 2013
WORKSHOP on MONITORING

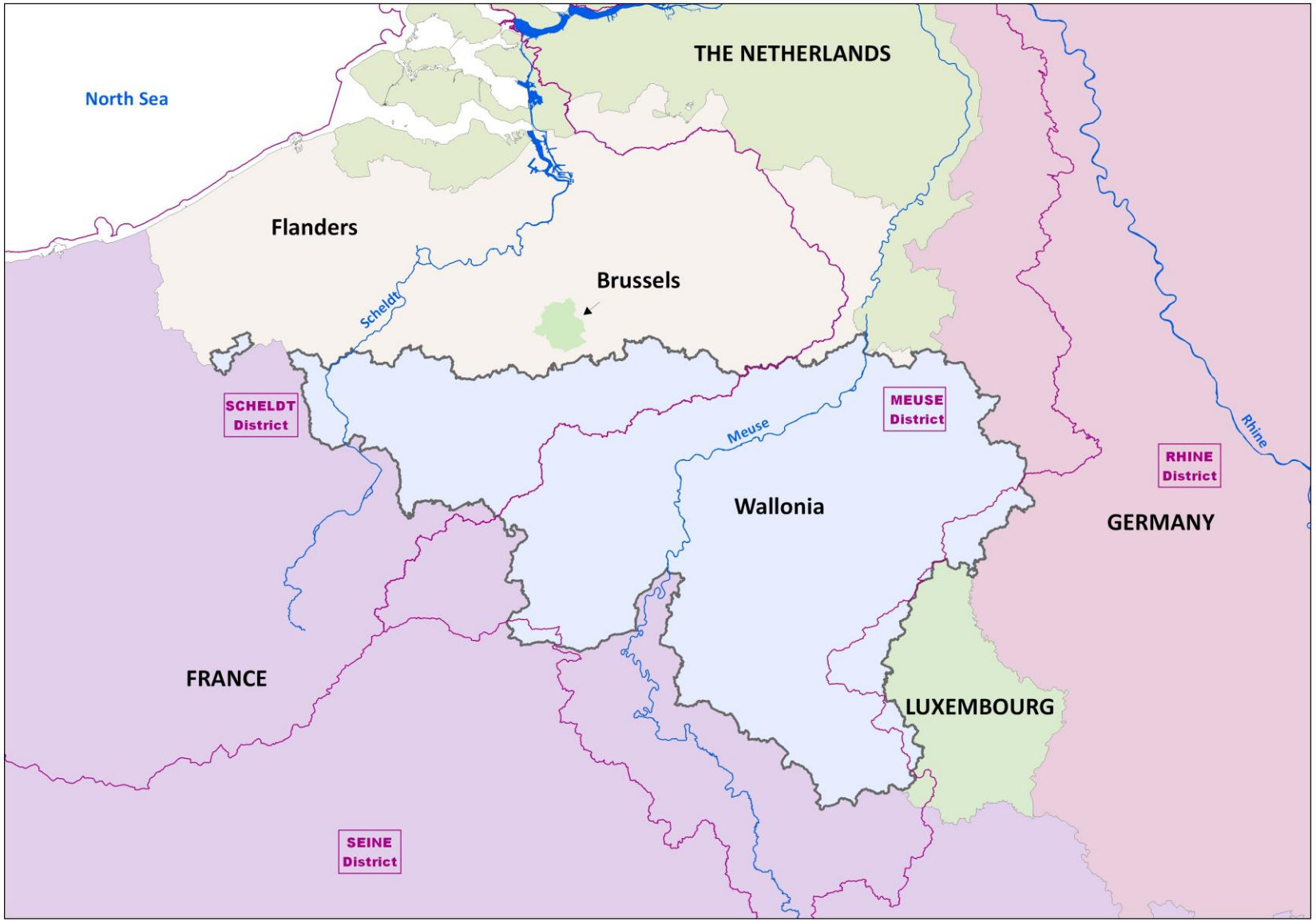
Wallonie

SPW
Service public de Wallonie

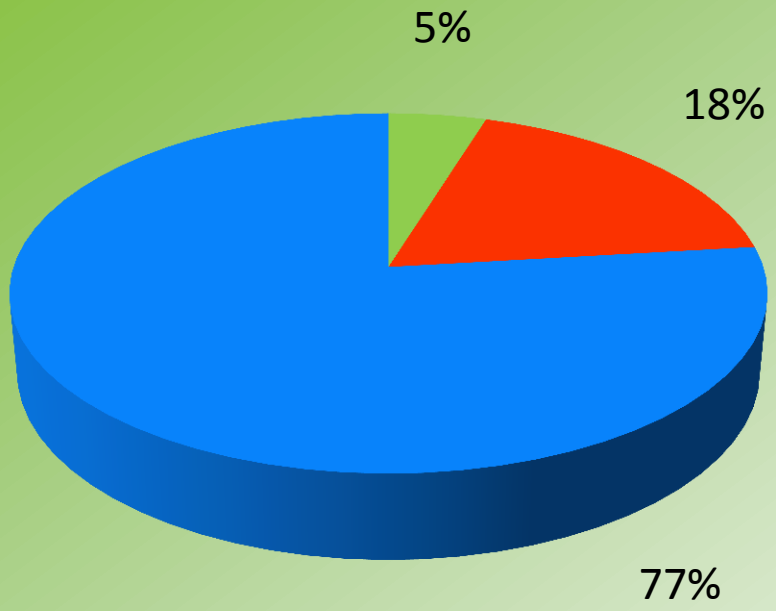
Surveillance networks evolution since 1975 through various European Directives in Wallonia (Belgium)

Pierre-Nicolas LIBERT


Finland
Norway
Sweden
Estonia
Russia
Latvia
Lithuania
Denmark
Byelorussia
Irish Republic
United Kingdom
Poland
Netherlands
Ukraine
Germany
Belgium
Czech Republic
Slovakia
Moldova
Georgia
Austria
Hungary
Romania
France
Switzerland
Slovenia
Croatia
Bosnia and Hercegovina
Yugoslavia
Bulgaria
Turkey
Italy
Macedonia
Albania
Greece
Portugal
Spain
Greece
Cyprus


THE NETHERLANDS
North Sea
Flanders
Brussels
Scheldt
SCHELDT
District
MEUSE
District
Meuse
Rhine
RHINE
District
Wallonia
GERMANY
FRANCE
LUXEMBOURG
SEINE
District

Surface waterbodies : 354



Main questions to be discussed

- Q1: What are the main criteria that led to the definition of monitoring programs (choice of number and distribution of sites, quality elements, frequency)?

-Q2: What evolution or recasting of monitoring programs (proportion of new sites, new quality elements, magnitude of changes in frequency, geographic distribution ...) are due to the implementation of the WFD?

- Q3: What are the perspectives of evolution of the monitoring programmes for the second cycle?

WFD monitoring network

- Previous network adapted between 2006 and 2008

- Each waterbody is monitored

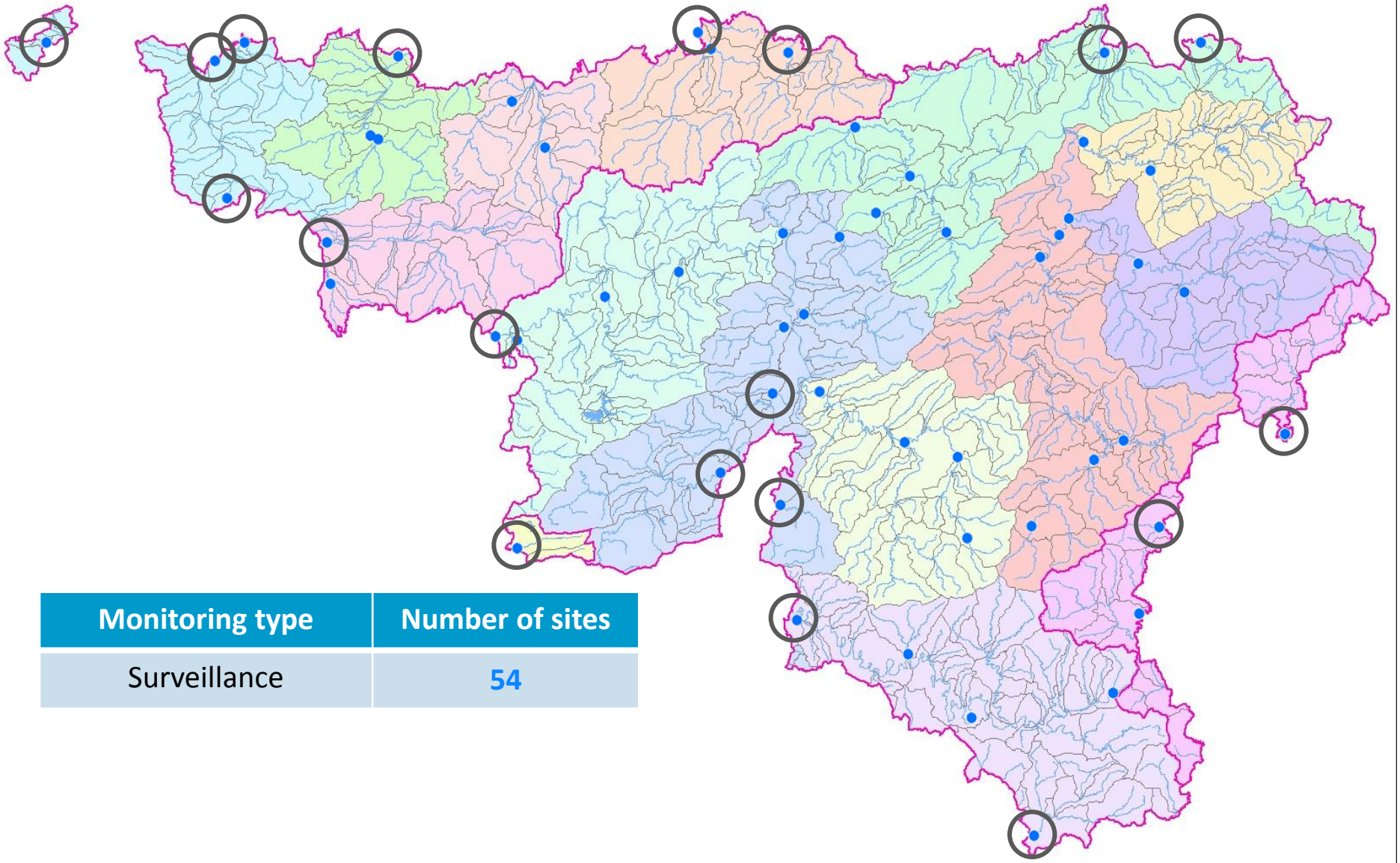
- Nearly all the sites are downstream

WFD Surveillance monitoring

In Wallonia …

54 sites

District	Number of sites
Meuse	36
Scheldt	14
Rhine	3
Seine	1



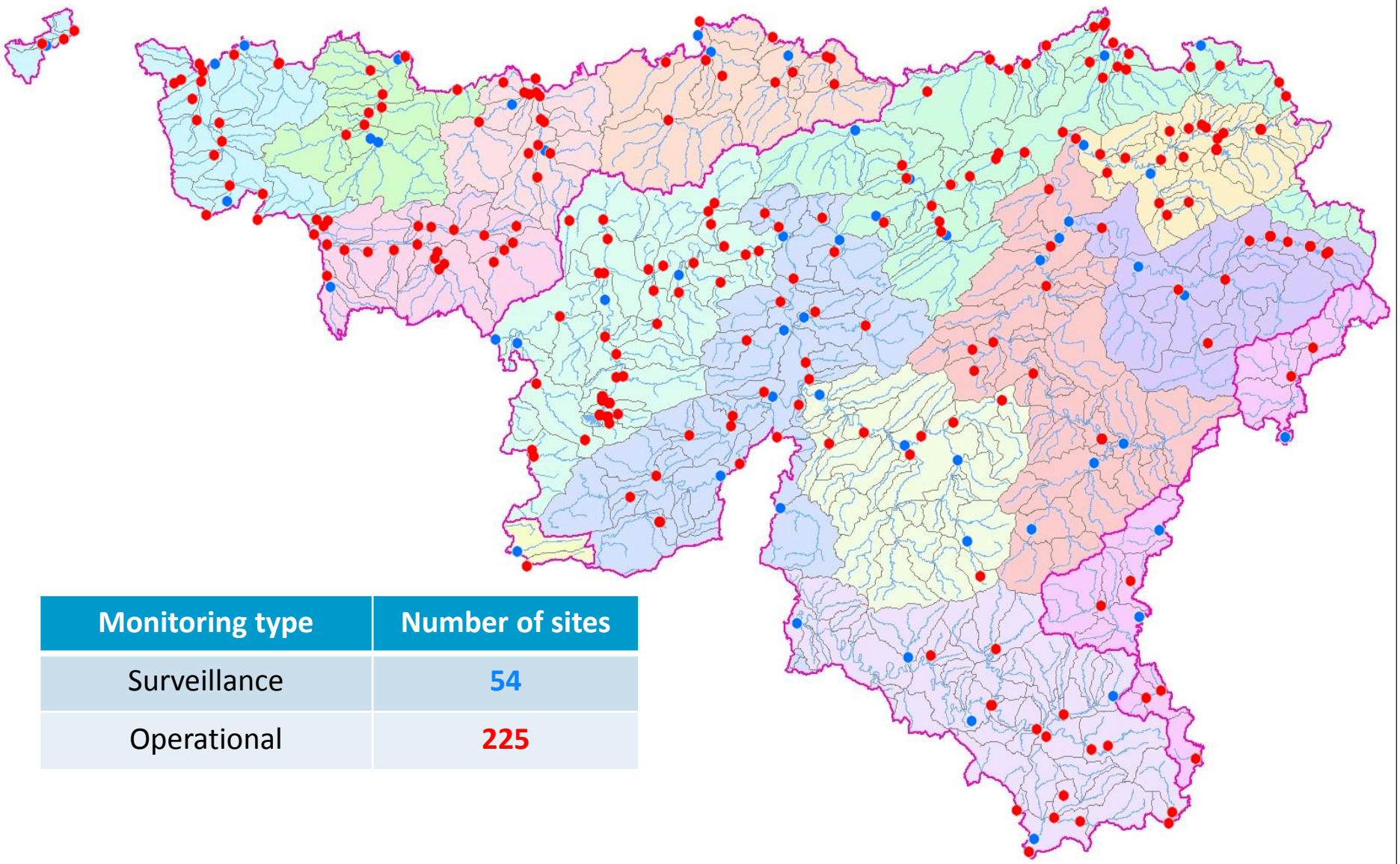
Monitoring type	Number of sites
Surveillance	54

WFD Operational monitoring

In Wallonia …

225 sites

District	Number of sites
Meuse	143
Scheldt	74
Rhine	7
Seine	1



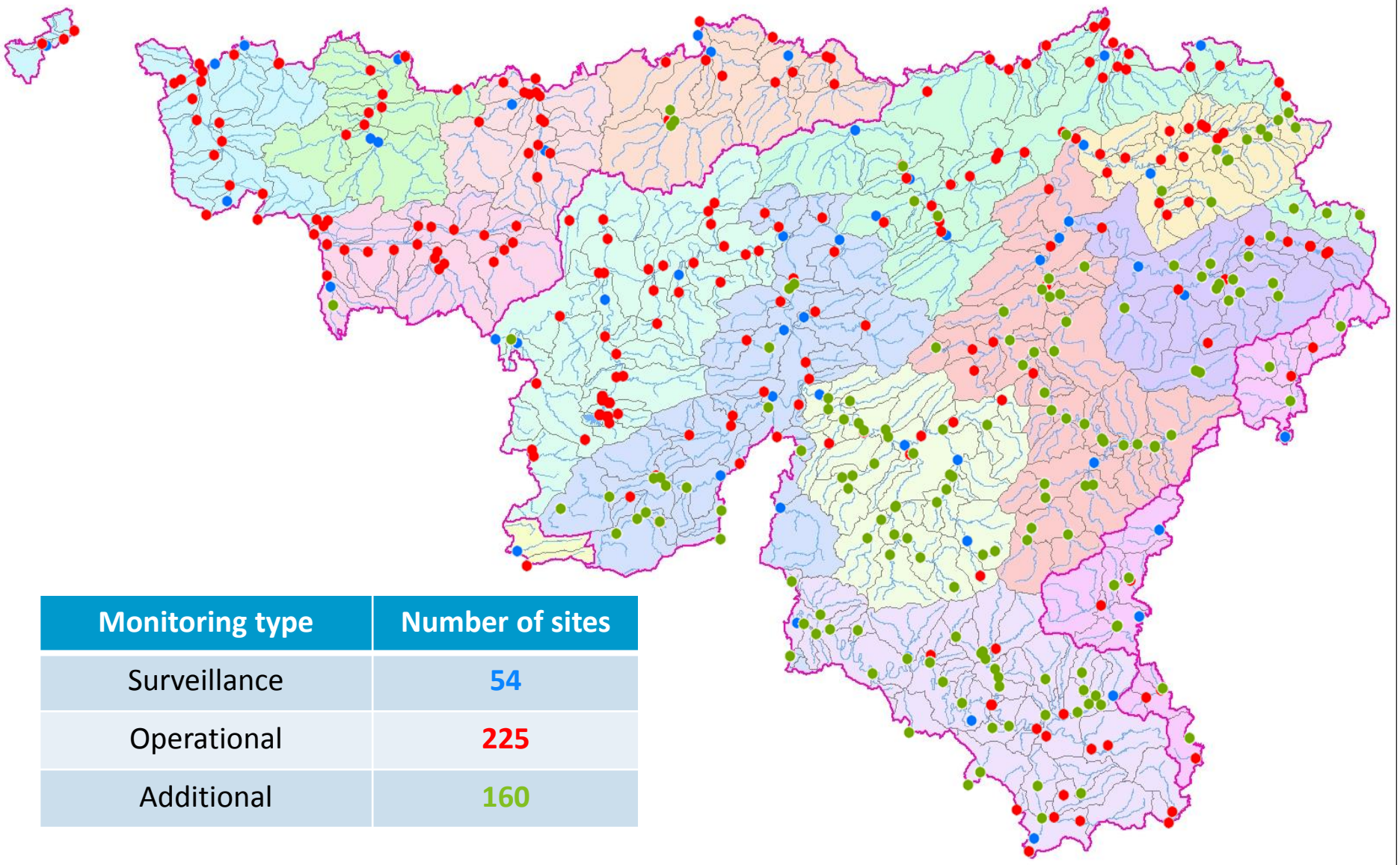
Monitoring type	Number of sites
Surveillance	54
Operational	225

WFD Additional monitoring

In Wallonia …

160 sites

District	Number of sites
Meuse	147
Scheldt	4
Rhine	9
Seine	0



Monitoring type	Number of sites
Surveillance	54
Operational	225
Additional	160

Frequency of the monitoring

In theory …

Quality elements	Periodicity of monitoring	Remarks
Biology	Every 3 years	Phytoplankon, every 6 months
Hydromorphology	Every 6 years	
Physico-chemistry	Every 3 months	Including specific pollutants
Chemistry	Every months	

Frequency of the monitoring

In practice …

Must be considered :

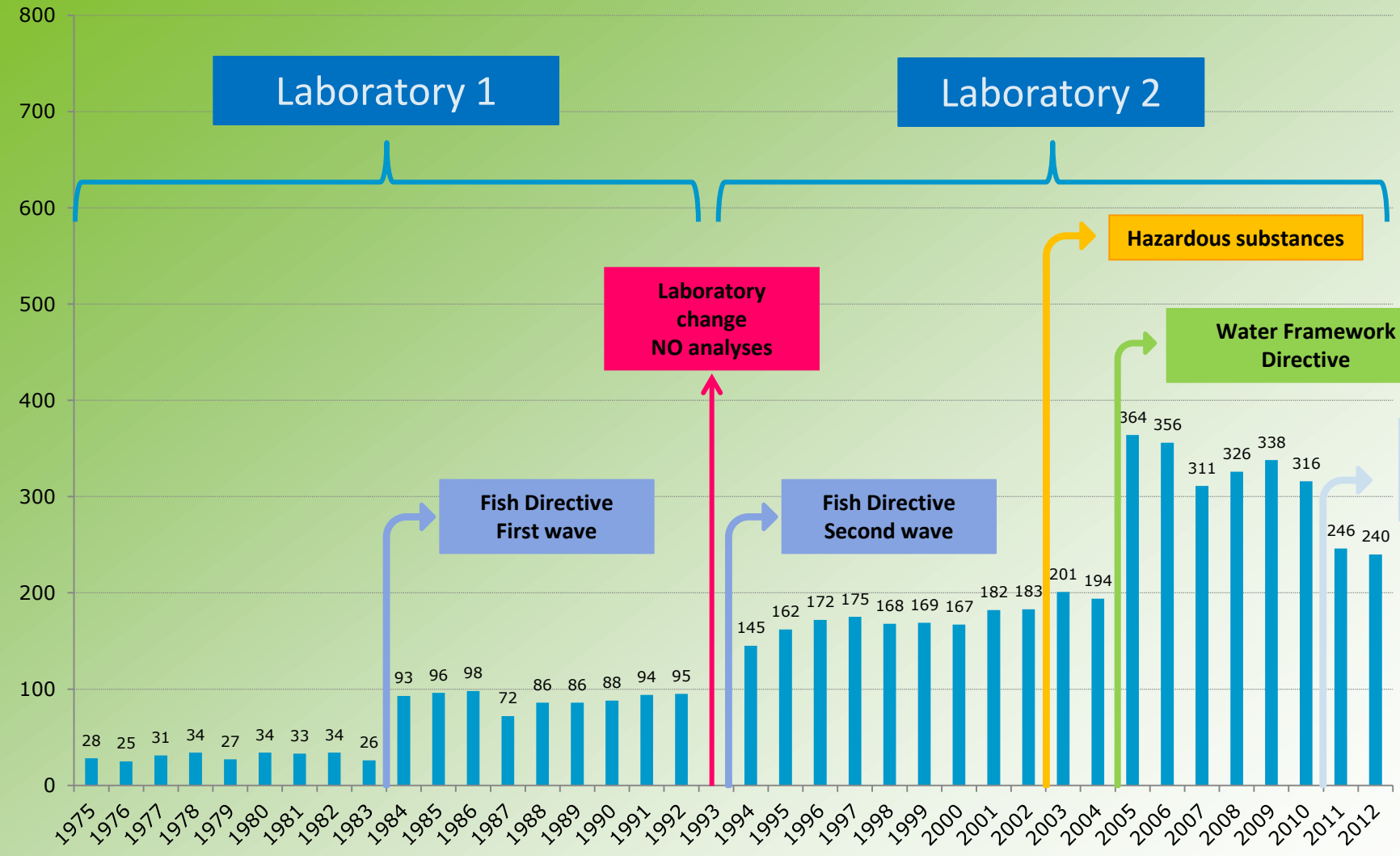
- the new network where some rivers were never followed
- constraints related to sampling methods
- the relevance of certain indicators

Frequency of the monitoring

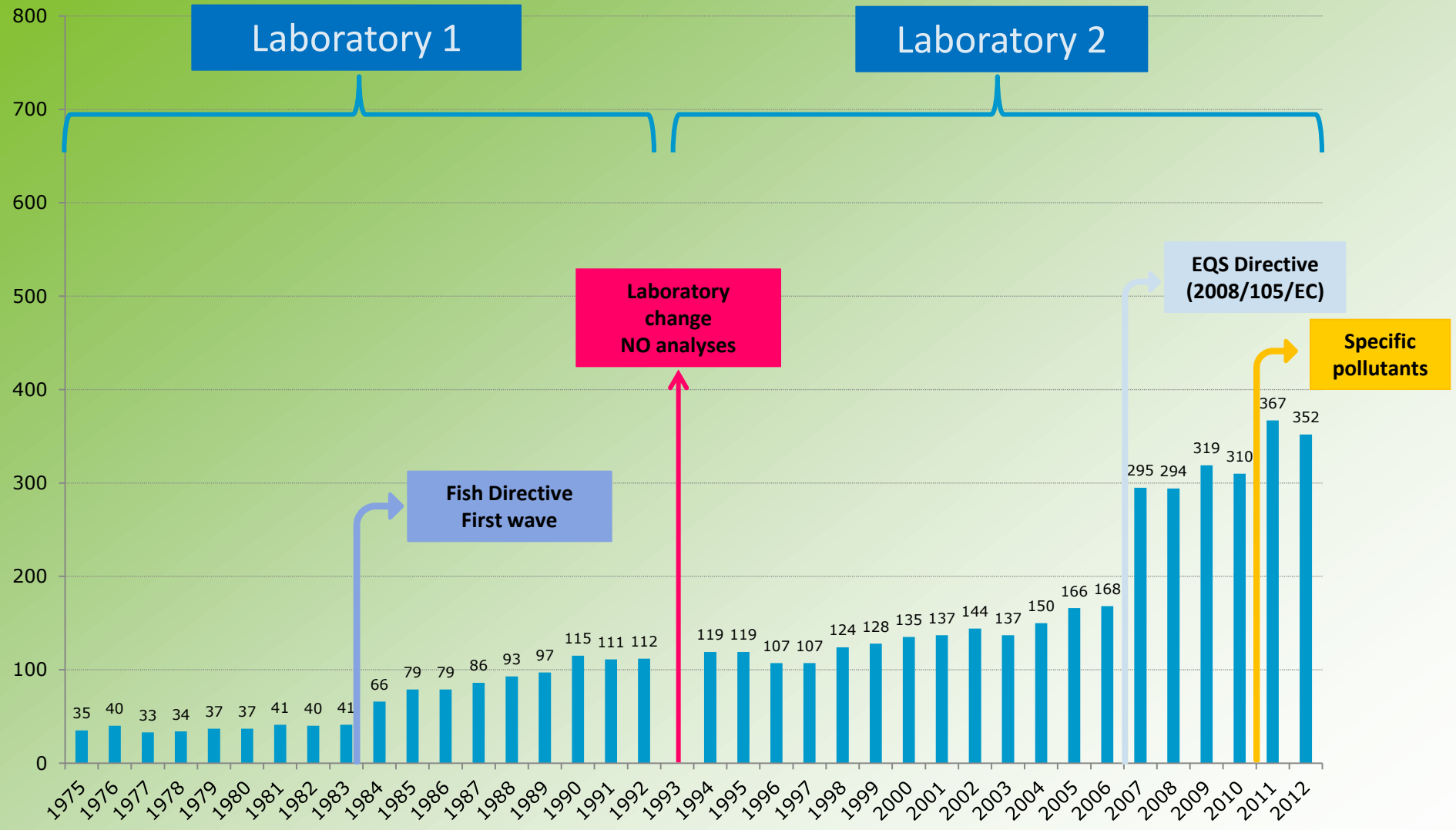
In practice …

Quality elements	Periodicity of monitoring		
	Surveillance	Operational	Additional
Biology – Macroinvertebrates	Every year	Every 3 years	
Biology – Diatoms	2 x/year every year	2 x/year every 3 years	
Biology – Macrophytes	Every 3 years	-	Every 3 years
Biology – Fishes	Every 3 years	-	Every 3 years
Hydromorphology	Every 6 years		
Physico-chemistry (16 + 56)	Every months	6 x/year every 3 years	
Chemistry	Every months	6 x/year every 3 years	

Evolution of the number of sites since 1975



Evolution of the number of parameters since 1975



Monitoring costs

In 2009

Indicators	Operators	Annual costs
Macroinvertebrates	Public	135.000 €
Diatoms	Public and private	145.000 €
Macrophytes	Public and universities	55.000 €
Phytoplankton	Universities	42.000 €
Fishes	Public and universities	125.000 €
Hydromorphology	Public and universities	136.000 €
Physico-chemistry / Chemistry	Public and private	4.673.000 €

→ **5,3 millions €**

In the future…

- New substances (2013/39/EU)

- No more biology if bad or poor status
=> waiting for physico-chemical status improvement

- Review of the specific pollutant list


감사합니다
Natick
Grazie
Danke
Ευχαριστίες
Dalu
Obrigado
Thank You
Köszönöm
Tack
Спасибо
Dank
Gracias
谢谢
Merci
Seé
ありがとう